

Office of Environmental Management – Grand Junction



Moab UMTRA Project
Spill Prevention, Control, and Countermeasure Plan

Revision 4

August 2017



U.S. Department
of Energy

Office of Environmental Management

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Review and Approval

[Redacted Signature]

8/16/17
Date

RAC Environmental Compliance Manager

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22 Aug 2017
Date

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8-22-17
Date

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8/16/17
Date

RAC Project Manager

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8/22/17
Date

Revision History

Revision Number	Date	Reason for Revision
0	June 2010	Initial issue.
1	January 2013	Update for company contacts and location of tanks.
2	July 2013	Update emergency contact phone numbers, inspection checklist, and frequency.
3	January 2015	Revision includes updated emergency contacts and removal of two tanks from map and checklist.
4	August 2017	Updates to entire document and addition of oil storage locations and TAC scope.

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	Crescent Junction Site Oil Storage Area Inspection Form 1019

1.0 Introduction

1.1 Purpose

The purpose of this Plan is to meet U.S. Environmental Protection Agency (EPA) requirements in Title 40 Code of Federal Regulations Part 112 (40 CFR 112), “Oil Pollution Prevention.” A facility is subject to spill prevention, control, and countermeasure regulations if the total aboveground oil storage capacity exceeds 1,320 gallons (gal) in containers of 55 gal or more, or the underground oil storage capacity exceeds 42,000 gal, and if, due to its location, the facility could reasonably be expected to discharge oil into or on the navigable waters of the United States.

The U.S. Department of Energy (DOE) Moab Uranium Mill Tailings Remedial Action (UMTRA) Project stores oil aboveground in quantities above the threshold at the former millsite near Moab, Utah, and at the tailings disposal site near Crescent Junction, Utah. The Moab site is bordered by the Colorado River and therefore meets the navigable waters criteria. Although the Crescent Junction disposal cell is not located where oil could reasonably be expected to discharge to navigable waters, this site is included in this Plan as a best management practice.

As defined in 40 CFR 112, oil includes oil of any kind or in any form including, but not limited to, petroleum, petroleum-refined products, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil. The definition of oil also includes non-petroleum oils such as animal, vegetable, and synthetic oils.

1.2 Certification, Maintenance, and Revision of Plan

Attachment 1 presents the self-certification of this Plan. A copy of this Plan is accessible through the Project SharePoint website.

The Plan will be amended within 6 months whenever there is a change in facility design, construction, operation, or maintenance that materially affects the facility’s spill potential. The Plan will be reviewed at least once every 5 years and amended to include more effective prevention and control technology. All changes will be certified by a registered professional engineer.

1.3 Facility Information

1.3.1 Moab Site

Address: 2021 North U.S. Highway 191
Moab, Utah 84532

Owner: DOE

Contacts: [REDACTED] [REDACTED]

Location: Approximately 3 miles northwest of the city of Moab in Grand County, Utah (see Figure 1). The Colorado River forms the southeastern boundary of the site. The Moab Wash runs in a southwesterly direction through the center of the site and joins the Colorado River. The Wash is an ephemeral stream that flows only after significant precipitation or during snowmelt.

Size: 480 acres

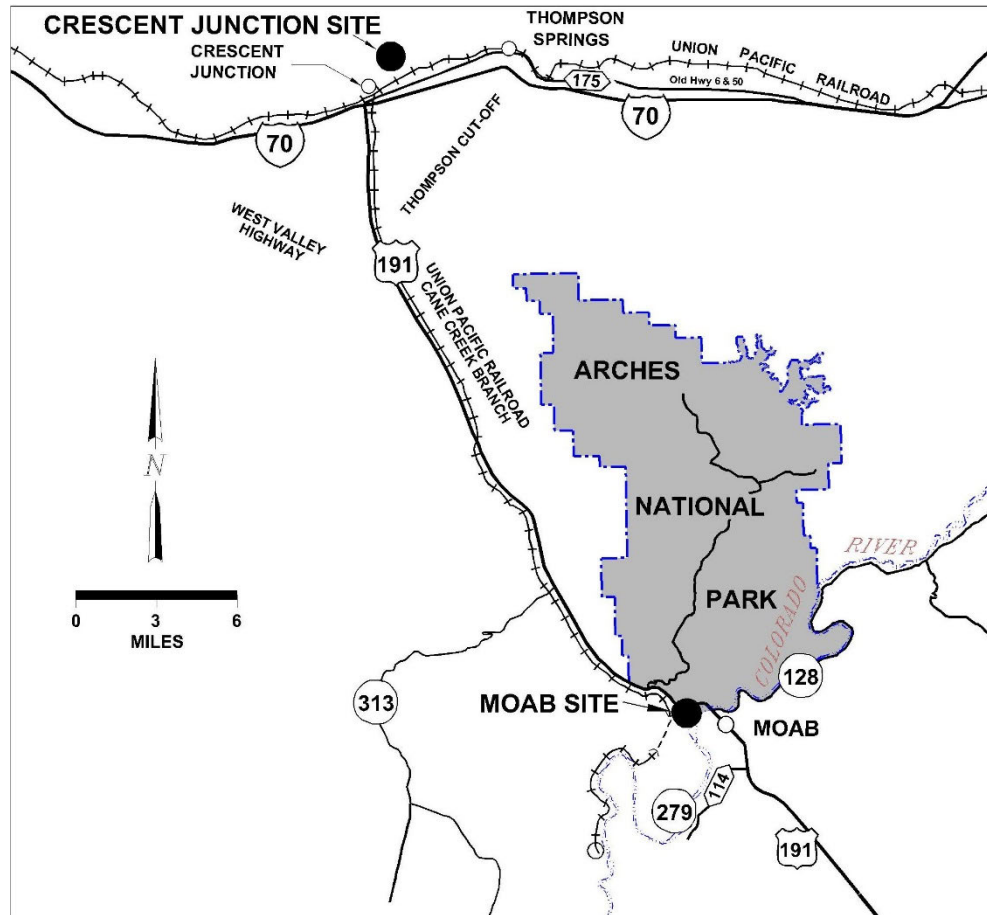


Figure 1. Location of Moab and Crescent Junction Sites

1.3.2 Crescent Junction Site

Address: 0.15 County Road 223
Thompson Springs, Utah 84540

Owner: DOE

Contacts: Contractor Crescent Junction Operations/Site Manager – [REDACTED]
Federal Project Director – 970-257-2115

Location: Approximately 1.5 miles northeast of the intersection of U.S. Highway 191 and Interstate 70 and about 31 miles north of Moab (see Figure 1).

Size: 500 acres plus an additional 936 acres in temporary withdrawal from U.S. Bureau of Land Management.

2.0 Sources of Potential Spills

2.1 Descriptions and Locations of Oil Storage Areas

The Project sites use diesel fuel for tailings handling and compaction equipment and gasoline for vehicles. Lubricants and used oil are also stored at both sites. There are no partially buried or buried tanks at either site. Table 1 lists each storage container with a capacity greater than 50 gal, the type of containment, and a reference designation corresponding to Figure 2 or 3, which show the location of the oil storage at the Moab and Crescent Junction sites, respectively.

2.2 Oil Delivery Truck Unloading and Transfer Operations

All oil is delivered via truck and unloaded to the point of storage by vendors under the supervision of Remedial Action Contractor (RAC) operations personnel following the *Moab UMTRA Project Delivery and Dispensing of Petroleum Products Procedure* (DOE-EM/GJRAC2066). This Procedure describes steps for delivery of fuel to bulk storage tanks in designated areas and delivery of lubricating oils in non-designated areas. [REDACTED]

[REDACTED] RAC operations staff also follow this Procedure for transfer of oil to and from bulk storage tanks.

3.0 Spill Containment

3.1 Containment and Diversionary Structures

Oil storage containers whose containment collects rainfall are required to have 100 percent secondary containment plus precipitation. The 10-year, 24-hour precipitation event for the Moab and Crescent Junction areas is 1.6 inches as reported in the National Oceanic and Atmospheric Administration Atlas 14 Point Precipitation Frequency Estimates. Several containers are double walled to provide secondary containment. Those that are single walled have been placed in lined dikes or containment basins. Containment dikes and basins were sized to contain the volume of the container, or largest container in the case where multiple containers were placed in a single containment structure, plus 2 inches of rainwater.

A large-volume fuel and lubricant service truck operates at both sites. The truck operating at Moab is located within the Contamination Area (CA) that has berms to prevent release outside the area. The truck operating at Crescent Junction is U.S. Department of Transportation-compliant with double walled tanks and operates outside the CA.

Oil storage containers at the Moab site are located to prevent spilled oil from exiting the site and away from areas of potential flooding.

Table 1. Oil Storage Containers and Containment Features

Storage Area Designation	Container Contents	Capacity (gal)	Location	Containment Method	Containment Volume (gal)
Moab					
M1	Used oil	2,000	West of Atlas building	Double walled tank	NA
M2	Used oil	60	Inside Atlas building	Steel basin	290
M3	Used oil	60	Inside Atlas building	Steel basin	420
M4	Fuel (diesel)	12,000	East of maintenance shop	Double walled tanks	NA
M5	Lubricants	3 x 350	North of maintenance shop	Double walled tanks	NA
M6	Used oil	550	North of maintenance shop	Double walled tanks	NA
M7	Fuel (gasoline)	500	East of decontamination pad	HDPE-lined dike	2,500
M8	Lubricants	4 x 500	West of Atlas building	HDPE-lined dike	800
M9	Lubricants	7 x 55	Inside Atlas building	HDPE pallet	70/4 Drum Pallet
M10	Used oil	150	Inside maintenance shop	Floor drain to sump	150
	Mobile fuel and lubricants	200 (fuel) 1200 (fuel) 4 x 100 (oil) 200 (used oil) 55 (grease)	Variable inside CA	Double walled tanks	NA
Crescent Junction					
C1	Fuel (diesel)	10,000	East of maintenance shop	Double walled tank	NA
C2	Used oil	2,000	South of maintenance shop	Double walled tank	NA
C3	Lubricants	55	Northwest of radiological access control	Galvanized steel and HDPE basin	65
C4	Used oil	330	East of radiological access control	Plastic basin	400
C5	Lubricants	3 x 270	Inside building east of maintenance	Coated wood basin	1700
C6	Fuel (gasoline)	500	North of maintenance shop	Galvanized steel basin	570
C7	Used oil	150	Inside maintenance shop	Floor drain to sump	150
	Mobile fuel and lubricants	800 (fuel) 3 x 100 (lub) 200 (used oil)	Parked inside maintenance shop	Double walled tanks	NA

HDPE = high-density polyethylene

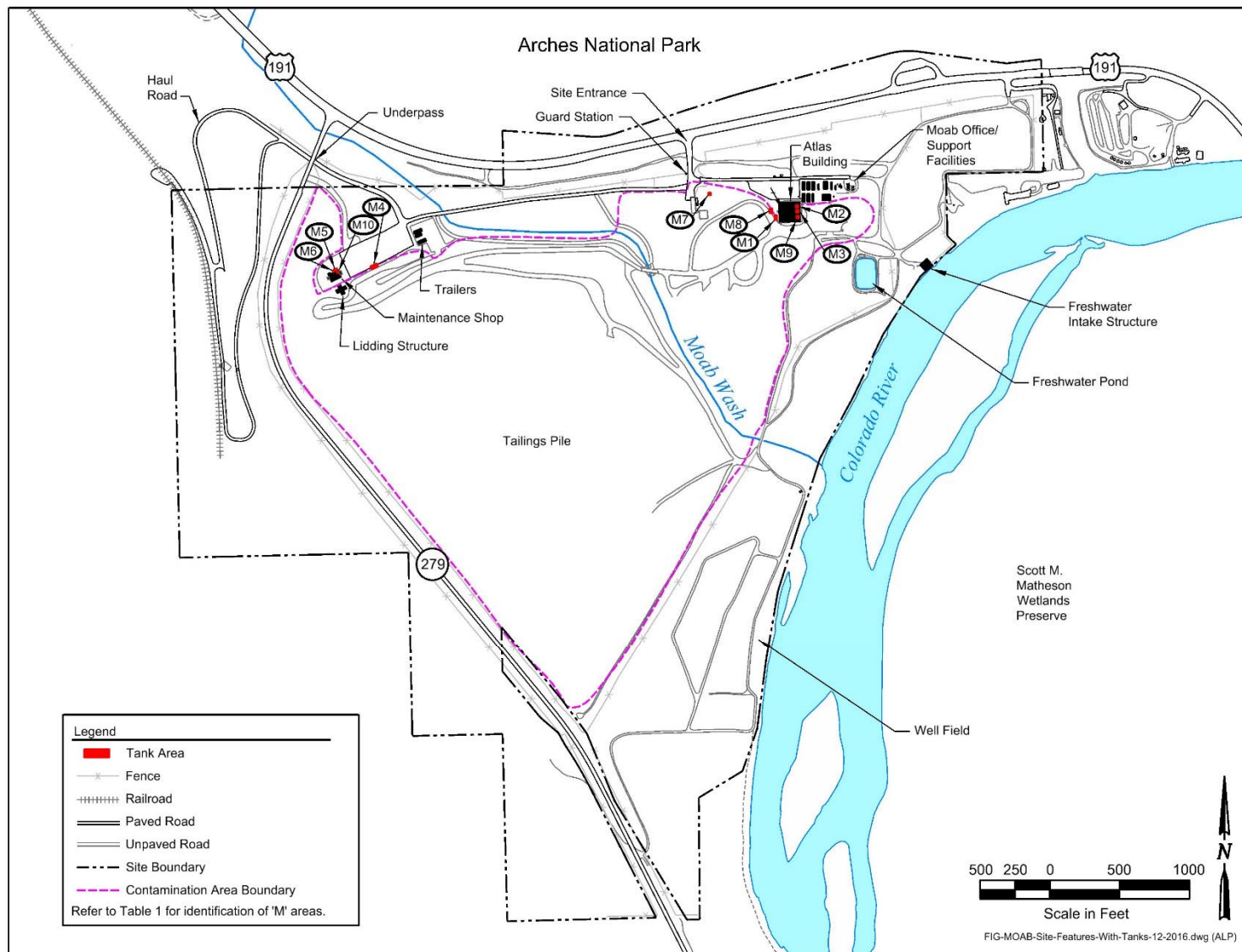


Figure 2. Moab Site Oil Storage Location Map

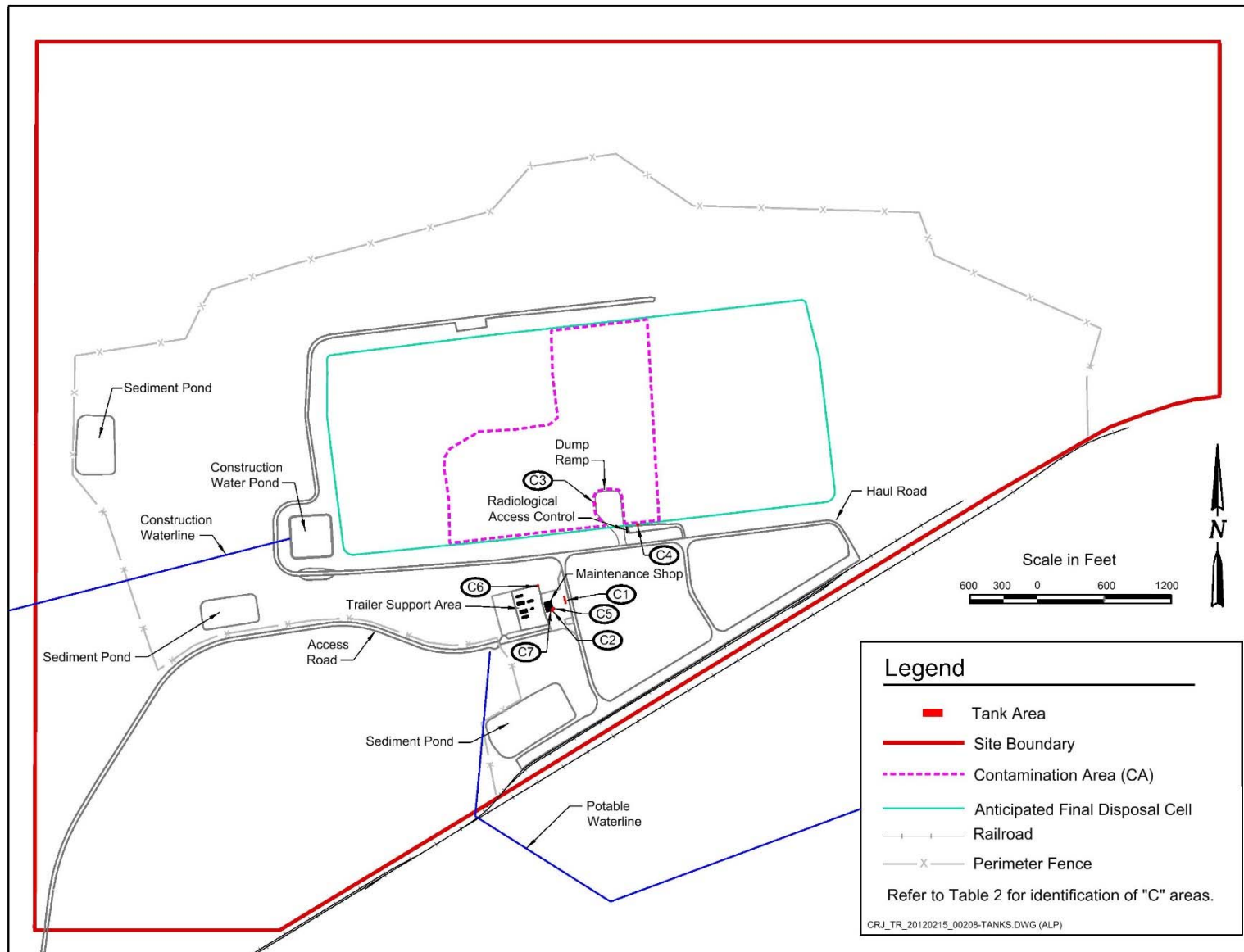


Figure 3. Crescent Junction Site Oil Storage Location Map

3.2 Spill Risk

Each oil storage container was evaluated and assigned a low-risk rating based on the condition of the container, adequacy of secondary containment, and potential for drainage to an unprotected drain or waterway.

3.3 Spill Response

Leaks that result in a loss of oil from container seams, gaskets, rivets, and bolts will be promptly corrected, and any materials contaminated from such leaks will be promptly removed. Spill response kits are available and used for minor spills outside secondary containment areas. If a spill occurs during transfer or in a manner that cannot be contained by secondary containment, absorbent pads and logs will be used in a timely manner.

Spill response protocols are included as an appendix to the *Moab UMTRA Project Emergency/ Incident Response Plan* (DOE-EM/GJ1520). A list of items in the spill response kits is included.

3.4 Cleanup Contractors

Following is a list of companies that provide spill response:

[REDACTED]

[REDACTED]

[REDACTED]

4.0 Reporting

Project personnel are to report all spills greater than 0.25 gal to the RAC Operations/Site Manager or Technical Assistance Contractor (TAC) Technical Group/Field Manager and the Environmental Compliance Manager for the contractor managing the area where the spill occurs. Spills greater than 5 gal are reported to DOE.

As specified in 40 CFR 112.4, if either of the following thresholds is exceeded:

- The facility discharges more than 1,000 gal of oil into or on navigable waters of the United States or adjoining shorelines in a single event, or
- The facility discharges oil greater than 42 gal in two spill events within any 12-month period,

The RAC Operations/Site Manager or TAC Technical Group/Field Manager, with DOE concurrence, must report the spill to the National Response Center and the state of Utah Department of Environmental Quality Environmental Response and Remediation.

The following information must be submitted to EPA Region VIII Administrator and Utah Department of Environmental Quality within 60 days of the exceedance:

- Name of the facility
- Name(s) of the owner or operator of the facility
- Location of the facility
- Maximum storage or handling capacity of the facility
- Corrective actions and/or countermeasures taken, including adequate description of equipment repairs and/or replacements
- Adequate description of the facility, including maps, flow diagrams, and topographical maps
- Cause of the discharge, including a failure analysis of the system and subsystem in which the failure occurred
- Additional preventive measures taken or contemplated to minimize the possibility of recurrence
- Other information the Regional Administrator may reasonably require pertinent to the Plan or spill event

Contact information for those entities and others that may be notified in the event of a spill is included in the *Moab UMTRA Project Emergency/Incident Response Key Personnel/Agencies and Contact Information (Emergency Contact List)* (DOE-EM/GJ1757).

5.0 Inspections

RAC environmental or health and safety personnel conduct quarterly visual inspections of the outside of all oil storage containers and record the observations on the appropriate Oil Storage Area Inspection Form (see Attachment 2). The inspection consists of a walkthrough of each oil storage area to check for damage or leakage; stained or discolored ground; and excessive accumulation of water, sediment, or debris in secondary containment areas; and to ensure the containment and structural support is adequate. Inspection forms are signed by the inspector and submitted to Project records.

The TAC conducts oversight of the RAC's compliance with this Plan in accordance with the *Moab UMTRA Project DOE Oversight Plan* (DOE-EM/GJF2089), including performing quarterly inspections of oil storage areas at both sites.

6.0 Security

The bulk storage tanks at the Moab and Crescent Junction sites are located within a controlled area and are surrounded by security fencing. The site entrance gates are locked when the site is unattended.

The sites are equipped with lighting in several areas to aid in the discovery of spills during hours of darkness. Lighting is also sufficient to illuminate several oil storage areas to reduce the occurrence of spills through acts of vandalism.

7.0 Responsibilities and Training

Spill prevention and identification is the responsibility of every employee on the Project. The RAC Operations/Site Managers and TAC Technical Group/Field Manager are accountable for spill prevention, containment, and cleanup of their respective areas. [REDACTED]

8.0 Records

All documentation created as a result of compliance with this Plan is considered a Project record and will be managed in accordance with the *Moab UMTRA Project Records Management Manual* (DOE-EM/GJ1545). This Manual follows DOE orders, policies, and regulations for creation, retention, and maintenance of records.

9.0 References

40 CFR 112 (Code of Federal Regulations), “Oil Pollution Prevention.”

DOE (U.S. Department of Energy), *Moab UMTRA Project Delivery and Dispensing of Petroleum Products Procedure* (DOE-EM-GJRAC2066).

DOE (U.S. Department of Energy), *Moab UMTRA Project DOE Oversight Plan* (DOE-EM/GJF2089).

DOE (U.S. Department of Energy), *Moab UMTRA Project Emergency/Incident Response Key Personnel/Agencies and Contact Information (Emergency Contact List)* (DOE-EM/GJ1757).

DOE (U.S. Department of Energy), *Moab UMTRA Project Emergency/Incident Response Plan* (DOE-EM/GJ1520).

DOE (U.S. Department of Energy), *Moab UMTRA Project Records Management Manual* (DOE-EM/GJ1545).

National Oceanic and Atmospheric Administration, Atlas 14 Point Precipitation Frequency Estimates.

Attachment 1.
Self-certification of Spill Prevention, Control, and Countermeasure Plan

**Attachment 1. Self-certification of
Spill Prevention, Control, and Countermeasure Plan**

Facility:

U.S. Department of Energy
Moab UMTRA Project

Physical Locations:

2021 North U.S. Highway 191, Moab, Utah 84532
0.15 County Road, Thompson Springs, Utah 84540

Facility Contacts and Phone Numbers:

[REDACTED]

[REDACTED]

Management Endorsement:

In accordance with 40CFR 112.7, this plan is approved by the Remedial Action Contractor (RAC) who commits the manpower, equipment, and materials necessary to implement this plan.

Signature: [REDACTED]

Name: [REDACTED]

Title: RAC Project Manager

Registered Professional Engineer Certification:

I hereby certify that I am familiar with the requirements of 40CFR 112, and I approve the attached plan and attest that this plan has been prepared in accordance with good engineering practices, and that it meets the U.S. Environmental Protection Agency criteria for such plans as set forth in 40CFR 112.7.

[REDACTED]

12/27/17
Date: _____

Engineers Seal:



Attachment 2.

Moab Site Oil Storage Area Inspection Form 1018
Crescent Junction Site Oil Storage Inspection Form 1019

Attachment 2. Moab Site Oil Storage Area Inspection Form 1018



Moab Site Oil Storage Area Inspection Form

Inspection Date: _____

Inspector's Name: _____

Answer Yes ¹ or No to the Following:	2,000 gal Used Oil Tank	60 gal Used Oil Heater Storage Tank ²	60 gal Used Oil Heater Storage Tank ²	12,000 gal Fuel (Diesel) Tank	3x 350 gal Lubricant Storage Totes	550 gal Used Oil Tank	500 gal Fuel (Gas) Tank ²	4x 500 gal Lubricant Storage Totes	7x55 gal Lubricant Storage Drums ²	150 gal Used Oil Tank	Mobile Fuel Storage Tanks ²	Comments
Tank Area Designation per SPCC Plan Figure 2	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10		
Is the tank or any pipes/hoses leaking?												
Is there damage to the tank?												
Are there cracks in or corrosion on the tank, piping/hoses, or tank supports												
Are there any oil products on the ground or in the secondary containment?												
Is there staining on the soils?												
Does the tank pad (foundation) appear to have shifted or settled?												
Is rainwater present in the secondary containment? If so, what is the depth?												

SPCC = Spill Prevention, Control and Countermeasure; gal = gallons

¹ If Yes, insert any identified corrective action in the appropriate column.

² Inside Contamination Area

Attachment 2. Crescent Junction Site Oil Storage Area Inspection Form 1019



Crescent Junction Site Oil Storage Area Inspection Form

Inspection Date: _____

Inspector's Name: _____

Answer Yes ¹ or No to the Following:	10,000 gal Fuel (Diesel) Tank	2,000 gal Used Oil Tank	2x55 gal Lubricant Storage Drums	330 gal Used Oil Tote ²	3x270 gal Lubricant Storage Totes	500 gal Fuel (Gas) Tank	150 gal Used Oil Tank	Mobile Fuel Storage Tanks	Comments
Tank Area Designation per SPCC Plan Figure 2	C1	C2	C3	C4	C5	C6	C7		
Is the tank or any pipes/hoses leaking?									
Is there damage to the tank?									
Are there cracks in or corrosion on the tank, piping/hoses, or tank supports									
Are there any oil products on the ground or in the secondary containment?									
Is there staining on the soils?									
Does the tank pad (foundation) appear to have shifted or settled?									
Is rainwater present in the secondary containment? If so, what is the depth?									

SPCC = Spill Prevention, Control and Countermeasure; gal = gallons; misc. = miscellaneous

¹ if Yes, insert any identified corrective action in the appropriate column.

² Inside Contamination Area